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NATIONAL ASSOCIATION of CORPORATION SCHOOLS

Bulletin

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Volume II

August, 1915

The National Cloak & Suit Company's School

By GEORGE B. EVERITT

Factory School of Simonds Manufacturing Company

By E. B. SAUNDERS

Wisconsin Board of Industrial Education Extracts from Biennial Report

New York Adopts Gary School Plan

Colleges add Industrial Courses

Experts Recommend Educational Surveys

PUBLISHED BY ORDER OF THE
EXECUTIVE COMMITTEE

The National Association of Corporation Schools

Headquarters, Irving Place and 15th Street, New York City

Objects

Corporations are realizing more and more the importance of education in the efficient management of their business. The Company school has been sufficiently tried out as a method of increasing efficiency to warrant its continuance as an industrial factor.

The National Association of Corporation Schools aims to render new corporation schools successful from the start by warning them against the pitfalls into which others have fallen, and to provide a forum where corporation school officers may interchange experiences. The control is vested entirely in the member corporations, thus admitting only so much of theory and extraneous activities as the corporations themselves feel will be beneficial and will return dividends on their investment in time and membership fees.

A central office is maintained where information is gathered, arranged and classified regarding every phase of industrial education. This is available to all corporations, companies, firms or individuals who now maintain or desire to institute educational courses upon becoming members of the Association.

Functions

The functions of the Association are threefold: to develop the efficiency of the individual employe; to increase efficiency in industry; to have the courses in established educational institutions modified to meet more fully the needs of industry.

Membership

From the Constitution—Article III.

SECTION 1.—Members shall be divided into three classes: Class A (Company Members), Class B (Members), Class C (Associate Members).

SECTION 2.—Class A members shall be commercial, industrial, transportation or governmental organizations, whether under corporation, firm or individual ownership, which now are or may be interested in the education of their employes. They shall be entitled, through their properly accredited representatives, to attend all meetings of the Association, to vote and to hold office.

SECTION 3.—Class B members shall be officers, managers or instructors of schools conducted by corporations that are Class A members. They shall be entitled to hold office and attend all general meetings of the Association.

SECTION 4.—Class C members shall be those not eligible for membership in Class A or Class B who are in sympathy with the objects of the Association.

Dues

From the Constitution—Article VII.

SECTION 1.—The annual dues of Class A members shall be \$50.00.

SECTION 2.—The annual dues of Class B members shall be \$5.00 and the annual dues of Class C members shall be \$10.00.

SECTION 3.—All dues shall be payable in advance and shall cover the calendar year. Any members in arrears for three months shall be dropped by the Executive Committee unless in its judgment sufficient reasons exist for continuing members on the roll.

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The National Association of Corporation Schools

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Edited by F. C. Henderschott, Executive Secretary

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No. 8

MORTALITY IN PUBLIC SCHOOL EDUCATION

At the time of graduation, in 1914, six hundred and sixty-one thousand pupils were enrolled in the public or grammar schools of New York City. Four thousand and seventy-nine graduated from the high schools of New York last year. This year twenty-three thousand seven hundred and twenty-seven boys and girls completed the elementary school course of study and were graduated from the grammar schools of New York City.

A writer in the *New York Globe* states:

"Not many more than half of these graduates will enter the high school or continue their studies in other institutions."

Of the fifty-eight thousand two hundred and three students in the high schools of New York in May of this year, over twenty-seven thousand were in the first year grades. Less than five thousand were in the classes of 1914. The exact number of students in the grammar grade schools of New York City for 1915 is not available, but probably the figures would be approximately seven hundred thousand. The number of graduates from the high schools of New York City this year was less than five thousand.

The conditions will vary somewhat in other cities. In some of the smaller cities it is claimed the number of graduates from the high schools is as high as twenty per cent. But the latest available statistics from the Government's Bureau of Education show that only about four per cent. of the adult male population of the United States has received any high school education. The percentage for the female population is not given, but the best available data indicates that while the figure would be a little higher it would not increase the number beyond five per cent. of the total for the United States.

This is a condition which confronts industry. The ninety-

five per cent. of the male population who do not receive high school training or other academic instruction go into industry and a sizeable proportion of the female population also enter industry, at least for a period. What proportion of this condition can be corrected through the public schools remains to be determined, but the present tendencies are favorable. The problem, however, confirms the necessity of the corporation school. Corporations cannot operate efficiently with untrained help. More educational training must be given to the boys and girls who enter American industry either in the public schools or in the corporation schools. With poorly educated, untrained employees American industrial institutions cannot gain and hold a position which will insure the supremacy of our country among the industrial nations of the world.

SPECIAL COURSES TO MEET INDUSTRIAL NEEDS

Sometime ago the BULLETIN called attention to the fact that certain industries centered in certain communities throughout the United States. For example, the automobile industry in Detroit, the laundry industry in Troy, the rubber industry in Akron. Now a new movement is taking root in our country. A survey has been made at Hammond, Indiana, and a booklet issued by the School Board of Hammond setting forth suggestions for elementary, industrial, pre-vocational and vocational education to be used in the Hammond field. The program offered has been based directly on conditions as they have been found to exist in Hammond and not on any general or theoretical assumption of the community's need. The trades introduced into the public schools will be those common to Hammond and those that will give the child a start in a vocation he can follow upon leaving school.

A similar movement finds its origin in Reading, Pa. The Bureau of Municipal Research of New York has completed a survey for the Chamber of Commerce of Reading and the report has been issued in pamphlet form for general distribution in Reading. An examination of the courses of study brings out the fact that the Reading schools do not anticipate the needs of their youth by providing instruction especially planned to help boys and girls in the particular industries in their city which many of them will enter. The report continues: "This does not imply that Reading schools should necessarily teach knitting or foundry practice but it does imply, because Reading has these special in-

dustries, that the schools of Reading should teach what is designated to help young people who will some day be engaged in these trades."

The BULLETIN is of the opinion that not only will the public schools recognize special industries and their requirements and shape their courses to more nearly meet these industrial requirements educationally, but that in time, universities will grow up around industrial centers and that the courses of such universities will specialize in the requirements of those industries. Certainly nothing could be more helpful to the boys and girls who must ultimately enter industry as a means of earning a livelihood and nothing could contribute more to the efficiency of industry.

SHOPSCHOOL UP TO SCHOOL BOARD

At a meeting of the woodworking manufacturers of Williamsport, Pa., the question of shopschools in the manual training department of the Williamsport high school was discussed at length. The attendance was very satisfactory and the consensus of the meeting was that the woodworking manufacturers of the city will heartily co-operate with the movement.

A typewritten report containing forty pages will be presented to the Board of Education for their consideration. Millard R. King, assistant in industrial education of the State department of public instruction, will explain the plan in detail.

The school board will be asked to secure additional equipment which will be necessary to install the shopschools in the manual training department. Practically no other expense will be incurred by the school board, as it is believed that the school will be self-supporting. There is a possibility that a reserve fund will be secured from the sale of the products manufactured by the high school boys. They will be put to work at iron work, cabinet and wood manufacturing.

"THE WORLD OWES ME A LIVING"

How owes? Have you earned it by good service? If you have, whether on the anvil or in the pulpit, as a toiler or a teacher, you have acquired a just right to a livelihood. But if you have eaten as much as you have earned, or, worse still, have done little or no good, the world owes you nothing. You may be worth millions, and able to enjoy every imaginary luxury without care or effort; but if you have done nothing to increase the sum of human comforts, instead of the world owing you anything,

as fools have babbled, you are morally bankrupt and a beggar.—
Horace Greeley.

PITTSBURGH "THE WORKSHOP OF THE WORLD"

The New Educational Law of Pennsylvania to Help in the Training of Boys and Girls

Pittsburgh public school officials have been informed that Pittsburgh has been chosen as one of the six cities of the State where summer schools for the training of vocational guidance teachers will be established this summer, preparatory to the opening of the continuation schools in accordance with a State law, January 1, 1916.

The salaries of the teachers and the operating expenses of the school will be paid by the State.

Dr. George W. Gerwig, secretary of the board, tells the *Pittsburgh Press* that a State representative was in Pittsburgh recently looking over the ground.

"It is, of course, complimentary to Pittsburgh that this city should have been selected for the home of one of these schools, for which the last legislature made an appropriation of \$1,000,000," said Dr. Gerwig. "Our city is known as the 'workshop of the world,' and to live up to its name we must 'properly train the workers of the world.' That is what these schools will do.

"The law provides that on and after January 1, 1916, every child aged sixteen or younger who is gainfully employed must either quit work and go to school or must attend a continuation school for eight hours a week.

"These schools will work a vast benefit to the children, to the employers, the community and the entire State."

EDUCATION AMONG COAL MINERS

BY FRANK HALL,

Deputy Chief Pennsylvania Department of Mines

The Pennsylvania miner and his children are particularly fortunate in the opportunities now afforded for mental improvement. The general awakening to the value of efficiency and the growing appreciation of the needs of the people in the way of education have had their effect on the mining communities and the result is seen in the increased facilities now at the command of both young and old. The mining institutes and voca-

tional schools in the coal regions, both new projects, are doing much to better conditions.

The Young Men's Christian Association is also lending valuable aid in the educational privileges it affords young men, and the Scranton Correspondence Schools have for a long time been offering most practical and at the same time inexpensive courses of instruction, of which many thousands of young men and women have availed themselves.

COST OF COLLEGE BOY SUMMED UP

According to the Figures it is \$4,000 for Raising and \$3,200 for Educating

What is a college boy worth? That's a question nobody can answer—but we are able to tell something about how much he costs, observes *Farm Life*. According to figures given out by Wisconsin University it costs \$211.65 to give each student instruction for the year. Of this amount, \$149.05 falls on the taxpayer, the rest being made up of gifts, federal grants and special fees and funds of different kinds.

In addition to this amount, of course, the student must pay his share of the expenses—board, clothes and incidentals, which might easily average more than \$300 a year. If another \$300 be added for loss of time, when the boy who is in school might be earning money, we would have over \$800 a year—or \$3,200 for a four-year term.

Well, that's a lot of money, but it ought to be a good investment. At six per cent. it would be less than \$200 a year, and even from a purely commercial standpoint it probably would be found that college graduates average more than \$200 a year in earning power above the young men who have never been to college.

We have to pay taxes to support the State universities anyway, and whenever we find it possible we should send our children to the university. There are many rewards, fuller and richer lives and increased service to the world—which cannot be reckoned in dollars.

A Chicago university professor says it costs \$4,000 to raise a child. Having invested that much money in our children we might as well make the gift to the world complete by adding a college education where possible, even if the administrator of our estate does find a little less to divide among the heirs.

EXPERTS RECOMMEND INDUSTRIAL SURVEY

To Study Needs of Children Who Leave School to Work. Suggest that City Has a Special Vocational Educational Problem

"To counteract the tendency to leave school, as well as to attempt to prepare children for the responsibilities of life," is given as the object of vocational training in the Reading, Pa., schools in a report prepared for the Chamber of Commerce by the New York Bureau of Municipal Research.

The report of the survey of conditions in the Reading schools has just been issued in pamphlet form by the chamber and is being distributed to proper officials and to members of the organizations.

It contains criticisms and constructive suggestions on administration, maintenance and records. It states that the administration organization has features making for efficiency. "The small board facilitates school administration and lessens the chances of cumbrous routine," reads the report.

System Inadequate

In speaking of the organization of the work of gathering information from schools, it says the system at present in vogue is inadequate. It recommends that a general information card could be used to give the information about a pupil customarily required for school reports. More complete and definite teachers' efficiency records are needed according to the report, although very favorable comment is made on the individual work of the teachers. It is pointed out that records of teachers' visits should give to all the benefit of the experience of one and that teachers' suggestions for the benefit of betterment of the schools should be recorded and given consideration. The report indicates that there is a big opportunity for the use of mechanical devices to save clerical labor.

Should be Simplified

It is recommended that the attendance records should be simplified and that withdrawals from school should be studied for possible prevention.

The comments of the bureau of investigation on the voca-

tional council of the Reading school district in reference to vocational training work are of interest.

In this connection the report says, among other things:

"The possibilities of this vocational council would be greatly enhanced if the members had at their disposal the sort of information about pupils and schools which the most up-to-date records would give and which Reading at the present time does not have for its own use.

Has a Special Problem

"To counteract the tendency to leave school, as well as to attempt to prepare children for the responsibilities of life, many cities have established courses designed to fit pupils for actual trade work.

"A cursory reading of the course of study brings out the fact that Reading schools do not anticipate the needs of their youth by providing instruction specially designated to help boys and girls in the particular industries which many of them will enter. This does not imply that Reading schools should necessarily teach knitting or foundry practice, but it does imply that because Reading has these special industries, the schools of Reading should teach what is designed to help young people who will some day be engaged in these trades. Since the original survey short unit-courses in a number of vocational subjects have been established.

"A complete investigation might well be made here, after the manner of the recent survey of the wool industry and clothing industry completed by the Rochester Chamber of Commerce. The things which the Reading boy and girl will do in their trades should be set up on one side, the things the other schools are teaching on the other; and then the discrepancies between the two should be bridged by the introduction of Reading features into Reading schools. This cannot be done in a day or in a year, but a beginning may be made at once.

Favor Industrial Survey

"A few questions to be determined through such an industrial survey are suggested: What do the youth of Reading do when they leave school? In their various occupations, what information do they need as to: Sources of raw material. Properties of raw material. Use made of finished product. Geo-

graphical considerations involved. Trade and commercial history.

"How much and what part of this information do they receive in the schools?"

"What further knowledge and better preparation can be given in the regular grammar and high schools?"

"How can the regular elementary and high schools make apprentices more valuable to their employers and to themselves?"

NEEDS OF WASHINGTON SCHOOLS

Three needs of the District of Columbia in relation to vocational training in the public schools were outlined by Stephen E. Kramer, assistant superintendent. The specified needs were as follows:

1. A law to make the boys of the city be in school or at work from the ages of fourteen to sixteen.

2. A survey of the city in order that all available occupations may be known.

3. More co-operation between employers and the schools.

"Washington has made a splendid advance along the lines of vocational education," declared Mr. Kramer, pointing out the work being done at the Smallwood and Lenox schools as a sample. Mr. Kramer said that in most cities where vocational training has been tried the boy is asked to leave his regular school work and devote all his time to trade work. In Washington, at the two schools mentioned, the children are given the regular public school work, such as is given in the other schools of the city, but by a rearrangement of the course spend two-fifths of their school time in regular vocational training.

"Vocational education is not going to be simply trade education," said the speaker. "Vocational education must be applied to the whole curriculum, and bring about a regeneration of the whole public school system. True vocational training, applied, will bring home to the public mind the shortcomings of many accepted theories of education, and will wake the public up to these shortcomings."

THE ULTIMATE REWARD

If you are exceptionally expert in your business the fact will leak out. Top notchers cannot conceal their good qualities.—

• *Store Chat*, Published by Strawbridge & Clothier Company.

COLLEGES ADD INDUSTRIAL COURSES

New England Institutions Now Paying Attention to Business Training

(Boston Staff Correspondent in *Philadelphia Public Ledger*)

The New England business man of the future is to be trained in college. This is one of the most striking tendencies observable today in higher education in this part of the country. Business men to a greater extent than ever before are seeking the college man with scientific business training and are going to the colleges with business departments for the new brains needed in places of trust and responsibility in the great commercial institutions.

Hence the colleges are finding it necessary to change their courses in order to be able to supply this demand, and a steady growth in the business branch has resulted in many institutions which but a few years ago were paying no attention to this side of college training.

Each year sees some additional and advanced step in this direction, such as that which has just been taken by Dartmouth in the establishment of a new department of "employment managers," which will start next fall. It illustrates how the New England college is progressing along practical lines, in the face of the still strong opposition hereabouts to vocational training or utilitarianism. The beginning of Dartmouth's new course will be accompanied by a still more radical departure than has been made hitherto. It will be conducted in co-operation with some of the big Boston stores and the Boston Vocation Bureau. Part of the students' work will be done for several months each year in actual service in the Boston department stores, where the problems of employment and personnel are coming to be recognized more and more as a subject for scientific handling by experts. Incidentally, the student who completes this course will practically be assured of stepping directly from the college campus into a high-salaried position in a new field not yet crowded.

Classics Yielding to Business

The classics are having a hard time to hold their own in competition with the modern tendencies. The ministry thirty years ago led in popularity with the college man, but the decline since then has been steady, until today the ministry in New England, on a vastly lower level, is barely holding its own. The law

is holding its own, but it is not gaining, while medicine is falling off slightly. Engineering and business are coming to the front and have the call today. The agricultural colleges are also prospering, with the practical courses strong favorites.

Even at Harvard this tendency is noticeable. Here the classics have lately sustained a blow in the death of Gardiner M. Lane, which has deprived this department of its special financial support. The Harvard Graduate School of Business, on the contrary, is increasing in popularity, while the Boston University has a growing business school that is attracting students in increasing numbers. Tufts has been given a fund of \$600,000 for the establishment of a business school, and it is expected that it will be incorporated as a part of the college course within a short time. Journalism is also showing an increased popularity in the New England college. Schools of journalism now are maintained at the University of Maine, Boston University and the Massachusetts Agricultural College, and it is believed that it is only a question of time, and probably a very short time, when Harvard and Yale will find it necessary to add this school to the university.

FRENCH WAR CRIPPLES LEARN NEW TRADES

French School Training One Hundred and Fifty to be Self-Supporting

Bourges, France.—The school opened here for the re-education of maimed soldiers is operating with great success. The number of pupils enrolled already is 150, nearly all of whom will be unable to work at the trades by which they earned their living before the war, and must learn some new means of making a livelihood.

A staff of eminent physicians is faithfully attending the unfortunates, preparing them for their changed future and helping to lighten their tasks. Among the instructors are former teachers who are themselves cripples.

In spite of their afflictions, the students go about their work gayly. Men who before the war were grocers, plasterers, barbers, and miners, are now designing patterns for lace, while farm hands and butcher boys are taking courses in electricity and architecture. The course in stenography and accounting is the most popular, the pupils including a former head waiter, a carpet layer and a gardener.

PLAN TO EXTEND INDUSTRIAL TRAINING

Manufacturers Asked to Submit Views on Education— Replies to Be Given to Leading Educators for Revision in Curricula

With a view of ascertaining how far the American system of commercial education goes toward meeting the needs of our developing export and import trade and what changes should be made to render the system more helpful, the National Foreign Trade Council has just issued a list of questions to be asked of the important manufacturers of the country, says the *New York Journal of Commerce*.

The questionnaire has been issued by the committee on commercial education for foreign trade, the chairman of which is Wallace D. Simmons, president of the Simmons Hardware Company of St. Louis. Mr. Simmons is a university man, and the committee is composed of both business men and educators. Among the former are Walter L. Clark, formerly vice-president of the Niles-Bement-Pond Company, of New York; John F. Fitzgerald, who as Mayor of Boston greatly extended Spanish instruction in the public schools; Stewart K. Taylor, president of the S. K. Taylor Lumber Company, of Mobile, Ala., and James A. Farrell, president of the United States Steel Corporation and chairman of the National Foreign Trade Council. The educators include Professor Edwin F. Gay, dean of the Graduate School of Business Administration, Harvard University; Professor J. W. Jenks, director of the Division of Public Affairs, New York University School of Commerce, and Professor G. L. Swiggett, of the University of Tennessee. Professors Gay and Jenks head institutions which are already effectively pioneering in the field of commercial education for foreign trade. The committee thus concentrates both business and educational experience to an unusual degree.

Information Desired

As a first step, letters have been sent to the heads of one thousand corporations and firms engaged in foreign trade requesting them to respond to the following five questions:

1. Do you find difficulty in obtaining young men whose education gives them the fundamentals which make it practicable for you to rapidly promote them in your export business and to

send them abroad as your representatives? If so, explain the difficulty and to what you attribute it. Suggest remedies (the more, the better).

2. How effective and useful, in connection with foreign trade, is the customary two years' instruction in modern languages given in high schools? Suggest changes in these courses.

3. Do you find high school graduates efficient material for clerical work in the home office? If not, what appears to be their deficiencies? Suggest needed subjects for training. Suggest better methods of training.

4. What changes in their general educational training would you suggest for those who expect to become stenographers and correspondents in your export department? (This refers to work in the home office exclusive of that which requires a knowledge of foreign languages.)

5. To what extent have you employed graduates of colleges, or graduate schools, in the work of your home office and to what extent has their preparation qualified them for work of this character? In what, if any, respect has their education appeared not to meet the requirements? Suggest subjects in which additional training would be helpful.

The data obtained will be communicated to a large number of educators and made the basis for a concentration of educational opinion, leading, it is hoped, to such changes in curricula as are shown to be necessary. The inquiry will also bring to the attention of business men what already has been done by educators.

URGE VOCATIONAL SCHOOL

"Yellow Paper" Tells Need for Better Guidance of Pupils

The Vocational Guidance Association of Brooklyn has prepared a "Yellow Paper" giving reasons for the war upon general inefficiency as waged by the Association. The paper takes up the situation which exists of young men working with little or no hope of advancement at an average salary of \$6. The advantages gained from the Association, which was organized under the auspices of the Manufacturers' and Business Men's Association, are explained with statistics showing the increase in salaries immediately upon graduation for boys with proper training. Judson G. Wall, 498 First street, is president of the organization.

THE NATIONAL CLOAK AND SUIT COMPANY'S SCHOOL

Instruction Embraces Three Forms of Training—A Comprehensive Educational System

BY GEORGE B. EVERITT

The National Cloak and Suit Company provides for the three forms of training to be found in Corporation Schools as follows:

1. Co-operative—in which High School students alternate weekly at the School and at the "NATIONAL."
2. Continuation—instructing employees in Public School branches.
3. Vocational —preparing employees in the class room for the work of the various departments of the organization.

The Co-operative Plan as applied to factory work is well established, as it has been successfully carried on in Cincinnati, Ohio, Fitchburg, Mass., Passaic, N. J., and other places; but in its application to office work it is yet in the formative stage. The "NATIONAL" is making the experiment with two groups of fifteen girls each from the Newtown and Bushwick High Schools, in co-ordination with the Board of Education of New York City. Their first week is spent in our School, where they are taught the principles and practice of Order Writing. They are admitted after an entrance examination and are treated exactly as other employees, being governed by the same rules and receiving the same salary.

In each of the High Schools one of the faculty is appointed as Co-ordinator. He selects the students for this plan, acts as an intermediary between the School and the Company, and keeps in touch with them in both phases of the work. The Co-ordinators act under the direction of Dr. Haaren, Division Superintendent of New York City. This arrangement is part of an extensive plan devised by Dean Schneider, of the University of Cincinnati. It is too early yet to speak of results, but there seems to be no reason why the Co-operative Plan should not be as successful in the office as in the factory.

The Continuation Classes also are controlled by the Board

of Education for New York City. At the "NATIONAL" six of these classes with an enrollment of one hundred and fifty pupils are conducted by two Public School teachers who teach Arithmetic, Grammar, Geography, Spelling, Penmanship, Hygiene and Home Nursing. Current events form part of the instruction, and the students—mixed classes of young men and women—take a lively interest in the weekly debates held in each class.

The Continuation Classes are not as important an element with us as in Department Stores and elsewhere, partly because the minimum age limit for our employees is seventeen and partly because the Company secures, as far as possible, High School graduates only.

The purely Vocational training, the teaching of system, comprises the greater part of the instruction of the School; forms, one might say, the real School. This has been developed from a few classes with one teacher to its present enrollment of five to six hundred pupils. The School occupies an entire floor of one building and includes the School Office, an Assembly Room, and six Class Rooms with modern School equipment.

The general purpose of the School is:

1. To instruct new employees.
2. To increase the efficiency of employees by giving them instruction in their present work.
3. To provide for promotion by giving employees instruction in advanced work leading to better paid positions.
4. To enable employees who are doing work for which they have no liking or no aptitude, to learn other more congenial work.

For example, an Order Writer earning eight dollars a week, may attend the School and learn Order Examining and after becoming competent she may earn ten dollars a week. From this she may advance to Adjusting, to Mail Examining, to Corresponding, in each case receiving an increase in salary.

Or an Adjuster, for instance, who is weak in her work may strengthen it by attending classes in Adjusting, or perhaps an employee in a Merchandise Department may wish to be transferred to an Office Department. If the transfer can be made she prepares for it by attending the proper class in School.

At present, instruction is given in the following, other classes being added when necessary:

Arithmetic	Hygiene	Rapid Calculation
Geography	Spelling	Filing
Typing	Penmanship	Proof Reading
English	Salesmanship	Auditing
Package Opening	Sheet Analysis	
Stock Keeping	Mail Examining	
Shipping Orders	Examining Merchandise	
Efficiency Records	Assembling Orders	
Mail Reading	Stock Records	
Listing Merchandise	Mail Assorting	
Filling Orders	Traffic	
Sales Checking		
Ready-Made Order Writing	Complaint Adjusting	
Order Routing	Adjusting for Head Clerks	
Returned Goods Adjusting	Back Order Writing	
Combination Adjusting	Order Advising	
Made-to-Measure Order Writing	General Mail Adjusting	
Order Examining	Correspondence	

Instruction is standardized on a basis of one hour a day, the class sessions vary from one week (5 hours) to three months (60 hours), and all classes are conducted in business hours, the employee receiving full pay while attending School. The enrollment in each class is limited, as far as possible, to twenty, experience having proved that the best results are not obtained with a larger number. Candidates for classes usually take an entrance examination which serves the two purposes of eliminating the unfit and of grading the remainder into sections according to ability. A number of written quizzes or tests are given during each course which closes with a final examination covering the entire course. The results are filed in the School and help to determine the promotion of employees. Besides the classes for employees there are others for office, department, and section heads. These are more in the nature of discussions, clearing up obscure points, explaining changes in system, unifying procedure and giving a breadth of view.

The method of instruction is similar to that employed in Public Schools. Text books or manuals, compiled by the teachers, are used for study and reference. In preparing a manual, the teacher investigates thoroughly the Department to be written up and then arranges in proper form the material to be taught. Her text is then edited by the Supervisor of the Department and

appears in loose-leaf form printed on one side of the page only, thus permitting corrections and additions arising from changes in system. Text-book instruction is accomplished by practical work which increases gradually until at the end of the course the student may go directly to work in the Department for which she has been preparing.

Teachers usually have four classes daily for five days a week, the remainder of the day being spent in preparation for classes, correcting examination papers, revising and compiling manuals, etc. As the School is also the center of the Office System, the teachers prepare the bulletins of instruction, covering changes in system. They also prepare and mark the "Look-up" questions given to clerks of various departments every two weeks. These questions are distributed to the clerks on Thursday and returned on Friday, allowing time to write correct answers—100 per cent. papers. These questions can be answered by referring to the Manuals of Instruction, Bulletins, Rule Book, etc. The purpose of the "Look-ups" is to keep employees up-to-date in their work.

The School includes all employees of the Company in the General Information lectures which are given in the Assembly Room with the aid of a picture machine. This lecture covers the work of the House in general and is intended to show the connection between the special work of employees and that of the House as a whole. After the lecture, House Trips are taken in which the material of the lecture is emphasized by observing the actual operation. Short trips are also given various classes in connection with the work.

Aside from its general connection with the various departments of the House, the School is in active co-operation with the Employment and Welfare Departments; and in addition to the teaching of scheduled subjects, it is an important factor in creating in employees a proper attitude toward their work and in developing a spirit of loyalty among them.

The Municipal University of Akron (the rubber city), formerly Buchtel College, is offering an exceptional opportunity to Akron boys in their course in chemistry, which includes a course in rubber chemistry under the instruction of Dr. Wm. F. Zimmerli. The purpose of the University is to give a thorough knowledge of general chemistry and its application to the rubber industry, and as far as possible a familiarity with crude rubber and compounding materials and their uses.

FACTORY SCHOOL OF SIMONDS MANUFACTURING COMPANY

**Its Aim is to Open to All Employees New Possibilities within
Themselves and in Their Work**

BY E. B. SAUNDERS

A widespread interest is being awakened in our country in industrial education. Old school buildings are being changed over to permit vocational training. Mechanics are leaving the shops to become practical teachers. Trade schools are being erected at large cost. Universities are adding new departments. Educators and manufacturers have come to realize that the industrial supremacy of America can only be assured by making our youth into skilled and intelligent workmen.

Another side of this same movement is the new ambition that has caught the mature workman. He cannot allow the boys to pass him at his own trade. He has become too one-sided by the division of labor and must acquaint himself with the business as a whole. The rewards of labor are going to the most efficient, therefore he must take a new grip upon his work.

The progressive management of the Simonds Manufacturing Company has always interested itself in the welfare of its employees. Through the Fitchburg Co-operative Plan of Industrial Education which the company has strongly supported, a number of promising young men are working one week in the factory and another in the High School.

Now the company has determined that the older workman shall have new opportunities. An educational department has been opened within the factory. It is not a school for apprentices. It is not a new form of management. Its aim is simply to open to the employees of all grades, new possibilities within themselves and in their work. Henceforward, no one is to work without motive. No one is to feel that his work is unimportant. No one is to complain that larger knowledge about the business is denied him so that he cannot advance to a higher position.

An attractive class room with an office for the director has been set aside in the main office. As the work has advanced an equipment has been added. The class room has now thirty arm chairs. On a table is spread out illustrative literature from other industries, government reports, magazines, etc.

Bookcases hold the beginning of a technical library and a museum. A large blackboard extends along one side of the room. Above this are charts, maps and pictures. A special case contains a stereopticon and radiopticon. The latest dictionary is on a standard for ready consultation.

The educational department has been making diligent research studies into all products manufactured by the company. The ancient history of saws has been deciphered. The mysteries of steel have been brought to light. The operations of sawmaking have been carefully listed in order and reasons given. The uses to which the saws will be put in the sawmills, carpenter shops, and factories, have been carefully inquired into. Pictures have been taken and an illustrated lecture prepared. The history of the business has been worked out. The organization has been charted. An efficiency chart has been drawn showing the ideals which govern the business.

A Correspondence Manual has been carefully prepared to standardize all letters. The copies of the letters are read over and criticized either before class or to the writer privately. An Office Manual is in preparation that shall standardize all the office operations.

Last year lectures were delivered before the office force and occasionally before the factory employees. This year a well-defined course of study has been undertaken. The company has been generous with time. Classes have been enrolled and records kept.

The teaching has been in part by the educational director, but experts have been called in from all departments of the company. Speakers from outside the factory organization have brought the latest word in their special lines. Many of the students have prepared papers or talks.

The curriculum for the early part of 1915 includes the following subjects:

Office Courses

I—PUBLICITY:

Studying ways and means of making the company's name and product known. Much attention was given to printed advertisements, types and forms. The subject includes window displays, lectures, literary articles, circular letters, etc.

2—BUSINESS:

A general course in modern business dealing with management, organization, accounting, banking, etc.

3—SELLING:

A course for those who would like to sell goods taking the principles of salesmanship, the steps in a sale, selling talk, the personal qualities and traits of a salesman, etc.

4—LETTER WRITING:

Open to stenographers and dictators of letters. Practical work in business English.

Shop Courses

5—SAWS:

Taking up the ancient history of saws, the development of Simonds Mfg. Co., the operations of making saws, knives and files, their uses in mills and the trades.

6—FOREMEN:

Dealing with the duties and problems of foremen, modern factory organization, the elements of efficiency, etc.

7—ENGLISH:

A course for foreign-speaking men who would like to learn English. The co-operation of the foremen was asked to select the right ones for this class. A primer was prepared on the shop terms, commands, processes and rules.

8—GARDENING:

Open to those who want to plant gardens and improve their land. Government bulletins and seeds were provided. Last summer a prize contest was held which will be repeated this year.

Attendance at these classes was not compulsory. Therefore it was gratifying to note the willingness and interest. Some of the classes numbered as high as forty. Department heads entered with clerks and workmen. By special permission men from the office entered shop courses and men from the shop came to office classes. This intermingling has increased the good feeling between shop and office.

Another result of this work is the independent inquiry that is coming all along the line. The whole force is alert for new information. All are seeking reasons for the work they are doing. This is bound to affect the suggestion contest in which

the company offers prizes for new ideas that will improve the goods.

BUSINESS AND EDUCATION

From the New York Times

The forecast of the relations of science and education to business which was given yesterday by Chancellor Brown, of the New York University, will probably strike some observers as idealistic. It is not commonly known what practical steps have been taken to secure the aid of business men in education and of educators in business, and that these have led to experiments as to the common training of students in both fields. Dr. Brown thinks that these adventures are a part of the natural evolution of our modern society and that they will prove the introduction to still wider and more influential changes.

We think that he is entirely right. Business is, after all, but the system by which the exchange of human products, material and intellectual, is effected. As the needs of men increase in number, become more varied, delicate, and complex, the system of exchange by which these are served is likewise modified and developed. Education in all ages has borne a direct relation to this process, and always those engaged in promoting it have wrought more or less consciously in sympathy with it. In modern times the demand of every community has steadily been for the more and more scientific treatment of education. And as science essentially is the reduction to orderly generalization of known facts—the discovery and formulation of “laws”—education has felt its influence increasingly. It will continue to do so.

Naturally, any innovation in this direction encounters a certain resistance and has to overcome a certain inertia. That is equally true of business. But in each field the forces that tend to development, to adjustment, to satisfying new and wider needs, go on, and with added effect. The old idea of education, which in its time was a rational idea, that it is a matter for a select and limited number, for a class set apart, is giving way, as is the old idea that business is a matter for individual management, in which mere energy, application, and shrewdness suffice for success. The world necessarily becomes complex, but its complexity is resolved by the scientific spirit, and it is inconceivable that education shall not lead in the application of that spirit. Education and business must assume closer relations because each needs the other.

WISCONSIN BOARD OF INDUSTRIAL EDUCATION

Biennial Report for the Period Ending July 1, 1914, Showing the Development of an Experiment in Industrial Education

Mr. H. E. Miles, President of the State Board of Industrial Education of Wisconsin, sends the BULLETIN a copy of his report submitted to the governor for the period ending July 1, 1914. The report shows that the legislature of 1909 created a commission to investigate the basis of education in Wisconsin. The resolution creating the commission recites that at that time (1909) there were at least one hundred and four thousand illiterates in Wisconsin. The commission which was created interpreted their work to consist of a thorough investigation of "the basis of education in that state," and proceeded with their study with the conviction that it was "the education of the great mass of the people, not the education of the few which must be thoroughly investigated and which must be reorganized upon a sound basis with an eye to the conditions of the future progress of our state."

The report continues:

What the Commission of 1910 Realized

"The Commission of 1910 realized at the outset that education in Wisconsin at that time was not fundamentally democratic. It provided a fairly well developed system of instruction for a very small percentage of the population who were so favored by fortune as to be able to take advantage of the higher forms of training which fitted for the professions and for the better positions in industry; but, with the exception of the University Extension Division, it offered no educational facilities for training the great masses of industrial workers. Instead, it released at the critical period of adolescence, thousands of children to fill the gaps in industry and to perform the highly specialized and monotonous tasks of poorly paid occupations, wholly unfitted to grapple with the problems that would confront them. They saw that few of these children would ever be able to lift themselves by their own efforts from the ranks of unskilled labor, that great mass of workers who find the problem of existence such an intense struggle from the cradle to the grave. The result of this vision was a conviction that the state should supplement by wise educational provisions the efforts of the child workers to push open the doors of opportunity to become something other

than unskilled labor, floating from one job to another, the sport and prey of changing industrial conditions.

The New Form of Education is Democratic Education

The recommendations of the Commission provided for a new form of education fundamentally democratic, involving the creation of a distinct administrative machinery, hitherto not utilized to the fullest extent in the development of education in this country.

The report recommended the creation of a state board of industrial education with control over state aid, but so related to the state school administration as to constitute practically a harmonious working machinery.

The new element brought to bear on the direction of education consists of a combination of state educational officials, employers and skilled employees.

The same provision was made for the control of vocational education in towns, cities and villages of 5,000 and over by education boards of the same general nature.

But the recommendation which was fraught with the deepest significance for the development of democratic education in this country was contained in the clause:

'That as soon as school facilities can be provided for children between 14 and 16 years of age already in industry, they be compelled to go to school a specified time each week; that this time shall be expended as far as possible in industrial training and that the hours of labor for such children shall not exceed 8 hours per day for six days of each week, which time shall include the time spent by each student in vocational schools.'

Failure of Regular School System to Provide Vocational Education

Theoretically, this state had compulsory education laws which required the attendance of children in the regular schools up to 16 years of age, but in practice about 50 per cent. left school at 14 years of age and by 16 years of age about 85 per cent. left. The investment of millions of dollars in educational equipment and teachers has not accomplished what was hoped for it. The public schools of this country have turned out the bulk of their material from the elementary grades without training that fitted for the practical problems of earning a livelihood.

The average grade represented by the 85 per cent. was the fifth or sixth. Their grasp of English, spelling, and arithmetic was uncertain. They had little or no facility in the application of what they had been taught to the problems of their occupation. They were ignorant of the qualifications needed for success in industry and business, and gravitated naturally to the poorly paid jobs, that offer little hope for advancement beyond a certain low maximum wage. Employers complained of the poor output of the schools, and in many instances progressive employers established schools in connection with their business or industry, to supplement the work of the public schools. But the majority of employers simply utilized the child labor which came to them from the schools in the more poorly paid tasks and left them to their fate, to sink or swim in the industrial whirlpool.

What This State is Doing to Supplement Individual Effort

There have been many examples of boys who have risen out of this industrial whirlpool into which they were plunged in childhood and who by dint of perseverance and initiative have gained positions of leadership in business, industry, and the professions, but where one has so risen by individual effort and assistance at the right period in their industrial experience pluck, thousands have gone down. A proper educational stimulus would have lifted many more into ranks of competency and well-being. The legislation of 1911, which embodied the recommendations of the Commission of 1910, created this stimulus and assistance in all towns, cities, and villages of 5,000 and upwards in the form of vocational schools for children between 14 and 16 years of age engaged in industry. The legislature did not leave this important work to be initiated at the option of local school boards, where conservatism leads to wasteful delay, nor did they leave the matter of attendance to the humanitarian spirit of employers, where again conservatism would discount the co-operation of the more enterprising, but they made this attendance compulsory. The results are bound to be in the interests of the conservation of manhood and womanhood in the state and the facts of the last two years' experience point conclusively to this issue to the legislation of 1911.

A Work of Human Conservation

The nation has been exercised over the conservation of natural resources, of minerals, forests and water power sites. But here is a work of human conservation that outweighs in

value all other forms of conservation. It is the conservation of human resources. The new form of education in this state lays the foundation for useful manhood and womanhood upon a basis of fitness for the vocation to be followed, and upon an intelligent understanding of the rights and duties of citizenship. It has been charged that in industry in this country, machinery and buildings have received more attention than the human element involved in manufacture. Wisconsin ranks high among those states which have recognized the human element in industry. Legislation has been passed to conserve the health and safety of the workers of the state and keep from the bitter experience of poverty those dependent upon workers injured in performing the tasks of industry. But the legislation which epitomizes the humanitarian ideals which should characterize an enlightened commonwealth is that which provides for the continuation of the education of workers engaged in industry along practical lines, the full fruition of which is democratic education.

The Universality of the New Form of Education

The new form of education is universal in application. It is for the worker when, as a child, he enters industry; for the boy when he enters an apprenticeship to become a skilled craftsman; for the older worker, who never had the opportunity to master the finer art of his trade; and it is for the person of any station in life who seeks knowledge by which he may push open the doors of opportunity to advancement in life. This form of education is for the people, for the mass of the workers. It is the open door to opportunity, to increased efficiency, to increased earnings, to higher ideals of life and society, and to a clearer conception of the fine art of living. In a word, it is the education of the open door.

The schools established under the new form of education have been termed Continuation, because in them the worker engaged in industrial pursuits may obtain instruction supplemental to his daily occupation. They have been called Continuation, because in them the child leaving school between 14 and 16 years of age continues his education by part time attendance in the day. They have been called Vocational because instruction is provided in these schools which aims to fit for a trade or vocation, as well as that which relates directly to the occupation of the pupils. But these schools should not be regarded merely as agencies for promoting industrial efficiency, which is merely one phase of the training given. The instruction in English, history, citizenship,

hygiene, physiology, and in the use of safety devices contributes to the making of higher-minded citizens and to the development of men and women with a larger capacity for enjoyment in life and for 'the pursuit of happiness.'

The New Form of Education Not Class Education

It has been stated that the new form of education is class education, and that it tends to distinguish between the education of the workers and the education of the rich and prosperous. Just the opposite is the case. The new form of education is founded upon the conviction that education is an inherent right, and that it should be made so accessible for every child, man and woman, that each may obtain that which they need to fit and prepare themselves for life. Thousands of children of the workers of the nation have to leave school every year and enter poorly paid positions in business and industry. The new form of education keeps the school door open for these children to continue their training, and it opens a new door for older workers who had to leave school under similar circumstances. Is this class education? Here is a boy of 14 years of age. His father is a punch press hand in a boiler shop, earning \$3 a day. There are eight children in the family, of whom this boy is the oldest. This family needs this boy's help of a few dollars a week. That increase in family income means just a little more of the necessities of life for the entire family; it means just a little more freedom to live; just a little lightening of the load. Now what would become of that boy without the training provided in the continuation school? In the school he studies drawing and shop mathematics, continues his general education, gains a working knowledge of hand tools and some appreciation of what he needs to learn to become a skilled worker. His ambition is stimulated, and he is taught the worth of all work performed honestly and well. That boy has a better chance to realize himself in whatever vocation he enters than did his father. The dream of most parents that their children should have a better chance than they ever had in life is in process of materialization in the continuation schools of this state.

Is this class education, that places an open door and bids the child and older worker enter into the advantages of a training that goes hand in hand with employment in business and industry and that fits for more successful pursuit therein? If it is, then the sooner this nation realizes its need for more of it, the brighter will grow the prospects for the development of a great people.

There is a mistaken notion abroad that this new form of education is class education, because there is not enough emphasis upon the cultural. What is culture? Is culture monopolized in the study required to master Greek roots, poetry, and classic literature? And is there no cultural training in that form of education which fits the individual for making the best use of his life and for doing honest work in the world? Is there not culture in the training that makes for service in life, and that will bring returns to the worker and to society? The old idea of culture has been superseded by a larger ideal. The true culture is that which gives an individual a true perspective of his place in the social organism; ability to meet successfully the demands of his industrial environment; a just view of the rights of individuals in life, and capacity to enjoy, because he can demand through efficiency, some of the good things of life.

Vocational Education

Vocational education is a general term, used to designate all forms of education which fit for useful occupations. It falls into four main divisions:

1. Agricultural education, which trains for the pursuits connected with the soil, its tillage and cultivation.
2. Industrial education, which trains for a trade or division of an industry.
3. Commercial education, which trains for work of buying, distributing, accounting, and other clerical duties connected with industry, trade, and commerce.
4. Household education, which trains for homemaking, by means of instruction in cooking, sewing and millinery.

The form of vocational education which comes under the supervision of the State Board of Industrial Education covers Industrial, Commercial, and Household instruction, together with instruction for general improvement.

The Vocational Schools of Wisconsin

The Wisconsin classification does not conform to accepted definitions of various forms of vocational education, as is shown in the following description:

1. *The Industrial School.*

Permit workers temporarily unemployed and pupils from regular schools 14 years of age and over attend this school all day.

The instruction given does not necessarily relate to industrial education, in the strict meaning of the term. Pupils attending what is called the all-day industrial school may be taking any form of instruction provided—industrial, commercial, household, or general improvement.

2. *The Continuation School.*

Permit workers 14 to 16 years of age attend this school. The same thing is true of the instruction provided for this class of pupils, as is described in the case of those attending the all-day industrial school.

3. *The Commercial School.*

Pupils may be either permit workers, employed or those temporarily unemployed, or pupils over 14 years of age from other schools. Instruction is provided in typewriting, bookkeeping and shorthand.

4. *The Evening School.*

a. For instruction in English, arithmetic and citizenship for persons over 16 years of age. This is called a general improvement course.

b. For vocational instruction of persons over 16 years of age, which instruction may be either preparatory or supplemental to the daily occupation of the pupil.

5. *The Apprentice School.*

For instruction of apprentices in subjects related to their trades. This school is generally classed with the continuation school. All the schools are vocational in that their controlling purpose is the fitting of the individual for a useful occupation as well as for citizenship. All are continuation schools in that most of the pupils have left the regular or common schools, and are here continuing their education in connection with their occupation.

The Wisconsin vocational school may be viewed as an entity with diverse instructional activities relating to industrial, commercial, household, and general improvement education, which activities may be classified as follows:

1. *Day Activities.*

a. For permit workers five hours a week.

b. For pupils attending all day five days a week, which pupils may be permit workers temporarily unemployed and pupils from other schools 14 years of age and over.

c. Apprentices, attending five hours a week.

2. *Evening Activities.*

- a. General improvement instruction in English, arithmetic, and citizenship for persons over 16 years of age.
- b. Vocational instruction for persons over 16 years of age.

This instruction may be either trade preparatory or supplemental to the daily occupation. Some states have imposed the restriction that evening vocational instruction must be supplemental to the daily occupation, but this is not the case in Wisconsin. The evening school exists for the people and should be ready to give the people that form of instruction which they think they need to help them in life. A grocer's clerk may study mechanical drawing and shop mathematics and do work in the school shop if he wants to prepare himself to be a machinist instead of grocer. There is no reason why the school should not afford this opportunity which is emphatically demanded in providing democratic education. The spirit with which cities in the state meet the situation is shown in the case of Milwaukee, where the superintendent of vocational education advises the people that the school will provide instruction in any subject for which any twelve persons in the city apply.

The Location and Equipment of Vocational Schools

The Vocational Schools have been located in central business blocks, in the first place as a convenience for permit workers, and in the second place because the atmosphere is more in keeping with their industrial and business experience.

The equipment of the school consists of such material, utensils, tools, and machinery as are required to provide instruction in cooking, sewing, salesmanship, typewriting, electrical work, wood and metal working. In large cities this equipment is more extensive. It is not necessary to install elaborate Trade School equipment in order to establish a continuation school of the Wisconsin type. The school does not aim to train in manipulative trade processes so much as to supplement the experience gained in employment, wherever the employment is of a character to make supplementary instruction of value.

Instruction Provided in the Vocational Schools

The 4,598 girl permit workers of the state receive instruction in cooking, sewing and millinery. A certain percentage obtain vocational instruction in salesmanship, typewriting, book-keeping and shorthand.

The 5,834 boy permit workers of the state take up industrial and commercial subjects. Most of the boys choose industrial education, which consists of instruction in the school shop in the use of tools and whatever machinery has been installed. The boys become familiar with the principles of wood and metal work, plumbing, and electrical work, and learn enough about trades to choose intelligently which vocation they want to follow. Much emphasis is placed upon instruction in shop mathematics and drawing.

Both boys and girls continue their general education, and receive instruction in English, history, citizenship, hygiene, physiology, and the use of safety devices.

The vocational school is not a trade school. It does not aim to instruct thoroughly in all the principles of a trade in the few hours a week school shop work available for instruction purposes, but it does aim to provide enough instruction in trade principles to enable a boy to discover his aptitude for some vocation. The school helps the boy to find himself, and starts him along that line of endeavor for which he has a measure of fitness. When a boy settles on what he wants to follow in life, then the school gives him the benefit of all its resources in that line, and encourages the boy to seek employment as an apprentice when he has passed the permit age. The school attempts to place the boy in industry in the vocation chosen.

The instruction provided for the permit workers temporarily unemployed, pupils over 14 years of age who came from regular schools, and for others over 16 years of age who attended voluntarily, of whom there were 1,158 in 1914, follows the same general lines as that outlined for the continuation school. These pupils attend five days a week, instead of five hours, and this makes possible a more extensive course of training. Even some adult workers unemployed attend for all-day instruction.

Apprentice instruction differs from that of the permit workers and all-day pupils between 14 and 16 years of age chiefly in the omission of school shop work, because the apprentice obtains experience in the manipulative processes of the trade in the shop where he is employed. More time is spent on drawing and mathematics related to his trade. He receives instruction in the general subjects which contribute to personal and social well-being.

The courses of instruction in the evening in vocational subjects include all the activities of the school. The school shops are in full swing, and classes in the entire range of vocations covered by the school are in session. Drawing, shop mathematics,

and practical demonstrations of trade principles and problems by use of models, constitute the instruction given.

The instruction in general improvement studies, English, arithmetic and citizenship, are attended by those from other countries who are anxious to learn the language and understand the principles of government of the land of their adoption. The value of this work of the evening school is inestimable, and it cannot be appreciated fully without visiting the schools in session, noting the eagerness with which these pupils labor to understand and master the means of communication in their new home. This is the potential citizenship of the country, coming under the beneficent influences of the public school system of the nation, and the work of the evening schools in this department is a powerful influence in elevating the standard of citizenship.

Advantage to Industry of Vocational Education

There is a distinct advantage to the boy and to the state in this work of the vocational school. Employers have for years complained of the quality of apprentice material. It has been claimed repeatedly that good apprentice material could not be had, and that when an employer did take a boy of 16 years of age, after that boy had spent two years out of school wandering about from one job to another, very often the boy turned out to be shiftless and unreliable and unable to stick to anything for any length of time. The statement has been true in many cases. But the vocational instruction of permit workers will change, and it is changing, this condition rapidly.

Part time instruction of permit workers steadies children at a critical period in their experience, and gives them intelligent direction in the choice of a vocation. The industries of this state will be benefited by this work. For example, there will soon be the finest kind of apprentice material available for trades and industries. The vocational schools are turning out such material now, and it rests with the employers of this state to provide the opportunity for the further development of the school output into skilled workers. This is not a charity proposition. The employers of the state will receive as much benefit as do the boys who are given the chance to become skilled workmen. Boys coming from these vocational schools will be able to take hold of the work usually given to a green hand and will have some knowledge of how to do the work right. Further than this, they will be more apt to stick, provided the employer gives them an opportunity to advance in the trade. These boys will know some-

thing about drawing and the application of mathematics to shop problems, which will be an asset both to boy and employer. The Vocational Schools are turning out boys now who are better fitted for employment in manufacturing plants, where trade operations are involved, than are most of the men who apply for work when times are prosperous and employers are hiring almost anyone who applies and breaking him in to operate expensive machinery. For example, many of these boys can operate a drill press, lathe, and milling machine; are somewhat familiar with drawing, mechanical and architectural; can work shop problems involving fractions, decimals, percentage, and ratio and proportion. In a short time they would develop into efficient workers, and would be capable of advancement to trade operations involving greater skill and intelligence. It is not claimed that these boys are skilled workers, but the fact stated is that the output of the vocational schools constitutes the best material in the labor market for the production of skilled workmen, and the logical conclusion is that employers will be helping themselves, when they afford opportunities for these boys to advance in their trade.

The Vocational School fills a big gap in the educational work of the state. Without it boys and men temporarily unemployed would be idling about the streets, wasting their time, forming habits of shiftlessness, and meeting with temptations that undermine character. Now it is different; the door of educational opportunity stands open to every such individual, whether youth or adult, to employ his spare time in the pursuit of useful knowledge which will better his condition in life. What this will mean in the years to come only those who have vision can appreciate.

Teachers for Vocational Schools

The plan for selecting teachers for vocational subjects from those skilled by actual experience in the vocation they are to teach has been followed. Men were taken from the shops and engineering departments of manufacturing concerns to take charge of the school wood working and metal working shops and of the classes in drawing and shop mathematics. Women were found in department stores and business establishments with experience in the trade and were placed in charge of the classes in sewing, millinery and salesmanship. The work of this class of teachers has been very creditable, in view of the lack of precedent and the difficulties inherent in the first stages of the organization of these schools. The chief difficulty the skilled worker has in at-

tempting to teach in these schools is to organize his knowledge so that he can impart it to others. On the other hand, this class of teachers had an immense advantage over a teacher trained in pedagogical methods but lacking in practical experience, in dealing with the pupils of the Vocational School. These boys and girls have left the atmosphere of the regular schools and have encountered the rough facts of business and industrial conditions. When they come to the Vocational School they meet teachers who know these conditions, not in any academic sense, but from actual experience, and who meet them on common ground, and instil confidence in their pupils and respect for the value of knowledge of their vocation, and of what is needed to advance in business and industry.

There is no doubt about the wisdom of having teachers who have had some actual experience to teach those subjects related to vocations in the vocational schools. But there is need also for supplementing this trade experience with some training in the art of teaching."

SEPARATE VOCATIONAL SCHOOLS

(*Chicago News*)

David Snedden, Massachusetts Commissioner of Education, has contributed a strong article on vocational education to the *New Republic*, in reply to an article by Prof. John Dewey. Mr. Snedden's views are of great interest to Illinois people, particularly since Prof. Dewey himself sees in his opponent's article a defense of the Chicago Commercial Club's bill, now pending before the legislature of this State.

"Those of us," writes Mr. Snedden, "who have been seeking to promote the development of sound vocational education in schools have become accustomed to the opposition of our academic brethren, who, perhaps unconsciously, still reflect the very ancient and very enduring lack of sympathy, and even the antipathy, of educated men toward common callings, 'menial' pursuits and 'dirty trades.' We have even reconciled ourselves to the endless misrepresentations of numerous reactionaries and of the beneficiaries of vested educational interests and traditions. But to find Dr. Dewey apparently giving aid and comfort to the opponents of a broader, richer and more effective programme of education, and apparently misapprehending the motives of many of those who advocate the extension of vocational education in schools designed for that purpose, is discouraging."

After a brief reference to vocational education as the oldest and most widely distributed form of education and a short account of the agencies that have been attempting to supply it, Mr. Snedden continues: "Now, many of us have been forced, and often reluctantly, to the conclusion that if we are to have vocational education for the rank and file of our youth as well as for the favored classes, we shall be obliged to provide special vocational schools for this purpose, because the historic agencies of apprenticeship training have in most cases become less rather than more effective as means of sound vocational education." He adds: "Modern economic conditions are such as to impair rather than enhance the capacity of employers to give satisfactory vocational training."

We must, then, fall back on State established and State supported schools for the solution of at least a part of this problem. Mr. Snedden tells how these schools should be managed: "Such so-called dual control as one finds in Wisconsin or as it existed in Massachusetts from 1906 to 1910 simply represents an attempt to put in immediate charge of a special form of education a group of persons who are primarily interested in its successful development, and who may be able to bring it to the point of view of practical men in that field. Business men generally are suspicious of the so-called academic mind in connection with vocational education. They feel assured neither of the friendliness nor of the competency of our schoolmasters in developing sound industrial education. For that reason they often favor some form of partially separate control, at least at the outset of any new experiment."

AVOIDING MISFITS

(New Haven, Conn., Register)

In New York, under the direction of Dr. William Ettinger, assisted by Superintendent Wirt, of the Gary schools, there is being developed a system of prevocational education which is proving amazingly beneficial. It is only a few years since the vocational training idea attracted attention. To make a boy or girl a fit, instead of a misfit, in life was a splendid advance in state education. But when the idea was put into practice it was found that it actually failed to reach the very children that needed the most help. Each year thousands of children enter the lower grades. As they pass to the higher classes they diminish in number. Out of hundreds of thousands in grades only a

few thousand enter high school, and of these only a few hundreds graduate. The thousands of children who drop out year by year go to work, their school training doing them little good. Few of them are equipped with knowledge or desire for any specific trade or occupation.

And so the prevocational plan was worked out. In the seventh and eighth grades of nine schools in New York a rotation of vocational classes has been established. The chief end is not production, but the discovery of sympathy in the boy or girl for some certain activity. The children are closely watched. They pass from one workroom to another. They have regular lessons designed to show latent tendencies. Better far for a child to discover in the grades that he detests some line of work than to drift into such an occupation, a misfit, uneasy and dissatisfied. Each child, however dull, has in him ability for some work. New York plans to extend the system as quickly as possible. To do so means to cut down the size of the classes, and this would seem to demand more equipment.

Here is where the original "Gary idea" enters. In Gary, Mr. Wirt has worked out a two-unit system which has increased the efficiency of the Gary schools by 50 per cent. He and Dr. Ettinger are today doing this in New York. And yet one school in New York has almost as many children as all the Gary schools combined! The prevocational training discovers the "bent" of the child, but it has made necessary a revision of the old system of academic training. No longer is geography to be taught by country or history year by year. Geography is a side issue of industrial history; history is the succession of economic movements; arithmetic is a matter of accounts which have to do with the shop in which the boy is obtaining his prevocational training. In one school the commercial department is the bookkeeping office for all the industrial divisions. By this system, it is believed, boys and girls may be saved from being misfits. Less time will be wasted. Earlier in life a boy may discover whether he wants to go into building, or engineering, or any line of industrial work. But whatever he does he has a broader primary education in the grade school, where he needs it most.

BAD ADVERTISING

The man who declares he has no time to study is unconsciously advertising his small calibre, his slavery to detail, his arrested development.—*Personal Efficiency.*

NEW YORK ADOPTS GARY SCHOOL PLAN

Board of Education Will Spend \$1,816,226 in Testing "Model City" System in Twelve Institutions There

The Board of Education of New York City has authorized establishing, on an extensive scale in New York City, the system of instruction that has been practised in the so-called "model" town of Gary, Ind., which the United States Steel Corporation built to order some years ago.

As a starter, a group of twelve schools in the upper north and east sides of the Bronx, one to be adapted to the Gary plan, and two new school buildings are to be constructed to be known as No. 54 and No. 55.

The cost of the new plan, as applied to the proposed Bronx group of schools was reported to the School Board as follows:

Alterations to eight schools and new equipment, \$52,260.

Additions to four schools, with new equipment, \$539,000.

Additional land for the four schools, \$225,000.

Two new buildings at \$500,000 each, \$1,000,000.

Total expenditure, estimated, \$1,816,226.

Of this sum, \$150,000 has been appropriated for an annex to Public School No. 45, and \$1,000,000 has been appropriated for the two new school buildings.

To Have New Features

Under the Gary plan the Bronx schools will be equipped with gymnasiums, studios, playgrounds, museums, libraries and workshops, in addition to the regular classrooms.

The net effect of the new system of instruction for elementary pupils above the fourth year is to lengthen their school day from four or five hours, as it is at present, to six hours and twenty minutes.

No more time will be devoted to actual study than at present. The aim of the course is to teach the children "how to live and how to earn a living."

While some of the pupils are in the regular classrooms, others will be in the special studios and laboratories, and still others will be in the playgrounds. The children will not be massed, as under the existing system, at play at one time or at study at one time, but the whole force will be broken up into alternating groups.

In this way the net capacity of each school will be so in-

creased that all part-time classes will be done away with, it is estimated, and not only will the children get a greater variety of study and recreation than ever before, but they will be kept off the city streets and their manifold temptations and physical dangers.

It is claimed for the Gary plan that it will solve, once and for all, the overcrowding and part-time problem in New York wherever the plan is applied.

A SCHOOL FOR MILLWORKERS' CHILDREN

The Board of Education of Columbus, Georgia, Find Way to Help Poor Children

A school specially designed for children of mill operatives is a feature of the industrial educational system of Columbus, Ga. The school was established with the idea of encouraging attendance among the large class of mill children in Columbus, many of whom were not going to school at all. The school is described by the *Dayton, Ohio, Journal*.

A handsome colonial residence in the mill district was purchased by the Board of Education for the new school. Special pains were taken to adapt the course of study and the hours in the school to the conditions of millwork. School hours are from 8 to 11, and from 1 to 3:30. The long intermission is to enable the children to take lunches to parents, brothers, sisters, and others who may be employed in the mills. This is a regular daily task with most of the children, some of them earning several dollars a week as "dinner-toters." The school itself is frequently termed by the children "the dinner-toters' school."

Although the aim of the school is industrial, the "three R's" are insisted upon even more severely than in the regular schools, because of the limited time the children have for schooling. "Although the prescribed course contemplates seven years," says a bulletin on the subject, "few of the pupils continue after the fifth and sixth year, so strong is the call of the mills. No more than one per cent. finish this school and pursue their studies further."

The three morning hours and the first hour of the afternoon are devoted to academic studies, while the last hour and a half of the day is given to practical work. All the boys are required to take the elementary course in woodwork and gardening. The girls take basketry, sewing, cooking, poultry raising, and gardening. The school is in session all the year round, and pupils are

promoted quarterly. The teachers live at the school and keep "open house" to the people of the community at all times.

This school is only one part of a carefully developed system of industrial training in Columbus that is intended to reach the needs of all parts of the population. Particularly significant to many communities is the Industrial High School, the aims and scope of which are also described in the Bureau's bulletin.

MANY WANT BUSINESS FELLOWSHIPS

New York University's Plan Promises Success—Nearly a Score of Industrial and Banking Firms in Scheme

Nearly a score of important industrial corporations and banks, announces the New York *Evening Post*, have arranged to take up the unusual business fellowship plan of New York University, proposed by Prof. Jeremiah W. Jenks. Under this plan the student who accepts a business fellowship gives half his time to the corporation, at a wage of \$60 to \$75 a month, and the balance of his time is spent in taking courses at the University which will best fit him for an executive position in the corporation upon completion of his studies.

The business fellowships, part of the work of the School of Commerce, have met with an unlooked-for response from college men. About 230 applications have come in from 73 different institutions in all parts of the country. So far about twenty fellowships have been arranged for, and these are now being filled. Among the concerns taking men in this way are the United States Steel Corporation, the National City Bank, the American Telephone and Telegraph Company, Robert E. Ingersoll & Brother, and others.

College Students Like the Plan

Twenty-five applications have come from men in New York University. Cornell sends twenty-two, the University of Wisconsin fifteen, Princeton thirteen, Purdue twelve, City College seven, the University of California and the University of Michigan six, Western Reserve five, Akron, Clark, Columbia, Lehigh, Oklahoma, Rutgers, four; Amherst, Case, Denver, Knox, Rochester, Texas, Trinity, Virginia Military Institute, University of Washington, three; Bowdoin, Colgate, Colorado, George Washington University, Middlebury College, University of Missouri, Oberlin, Ohio State University, University of Oregon,

Rose Polytechnic Institute, Swarthmore, Wesleyan, Wittenberg College, Yale University, two, and twenty-three more institutions one each.

The fellowship arrangement provides that the man receiving it shall give concern supporting it half of his time while the University is in session, and full time during the summer, and shall be paid a living wage, say about \$60 or \$75 a month.

Special Training for Executive Positions

In the School of Commerce he will take such work as is especially adapted to fit him for an executive position in the company. For example, if a college man is appointed to a business fellowship in a banking house which desires to train him as a branch manager abroad, he will obtain a knowledge of the various departments in the bank, and an understanding of banking practice and routine. At the University he will study foreign exchange, commercial markets, American industries, shipping regulations, foreign banking systems, and so forth. Special training in a foreign language will enable him to do business abroad.

Professor Jenks says that the business houses are pleased at the calibre of the men who have applied.

VOCATION GUIDE TO AID STUDENTS

An investigation has been completed by the Public Education Association of Philadelphia, which promises to be a great aid to the advocates of vocational training in that city. The Association has collected data in regard to vocational courses taught in all of the schools, public, private and philanthropic in the vicinity, and the results have just been published in a pamphlet under the title, "A Survey of Opportunities for Vocational Education In and Near Philadelphia."

The scope of the investigation includes industrial, commercial and professional education, and 180 institutions are covered by the survey. The material has been carefully classified and analyzed, and arranged in chart form, so that the student desiring information in regard to a particular course can at a glance compare the requirements, the tuition fees and the time required in the various institutions offering such a course.

A carefully arranged index at the back of the volume lists over 250 subjects having a vocational bearing, taught in the institutions included, with references to the pages on which more detailed information regarding them may be found.

This study, which was compiled by Miss Jane R. Harper, special investigator for the Public Education, represents the first attempt to bring together the great mass of information in regard to vocational education in Philadelphia, and presents in understandable form material which should be of the greatest help to parents and teachers, to vocational counselors, and to students seeking courses of training for their chosen line of work.

OUR FUTURE MEN.

(Chicago Blade)

"It is the duty of the national government to provide for the future of the boys of the nation by giving them vocational training."

This was the statement of Judge Dolan, who presides over the boys' court of Chicago. The majority of those with whom the judge comes into contact are lads of 18 to 22 years of age who are out of employment and frequently are not skilled in any line of work.

Judge Dolan declares that the nation is too indifferent to the fate of its future men. There are only a few public schools where boys are given an opportunity to learn trades and professions. Even the vocational training in state reform schools cannot be given to a boy unless he is classed as a criminal and sent there as punishment.

"In a book of memoirs of Lincoln I found an astonishing statement," said the judge. "In the Union Army in the Civil War there were 2,000,000 soldiers under 21 years of age, 1,000,000 of them under 20, 800,000 under 19, and 200,000 under 17. If this country had to go to war it would again depend in the main on its youths, and since these are the boys who are to protect their country they should be taken care of by the nation. The government should establish vocational schools where young boys might be taught trades that would enable them to earn a good living, where all could prepare themselves for manhood under the best of conditions. It is the duty of the national government to safeguard the future of the boys on whom it must depend in peace as well as war."

TO DISCUSS VOCATIONAL SCHOOLS

Plans for the extension of industrial and vocational training in public and private schools will be discussed at a conference of educators and manufacturers at the Hotel Biltmore, New York,

September 23d to October 2d. Coincident with the conference there will be an exposition of school equipment and work at the Twelfth Regiment Armory, Columbus avenue and Sixty-first Street. Governor Whitman is honorary Chairman of the Conference Committee, of which Dr. John H. Finley, State Commissioner of Education, President Thomas W. Churchill of the Board of Education, Borough President Marcus M. Marks and Congressman Walter M. Chandler are members.

BUSINESS AND MENTAL EFFICIENCY

J. S. KNOX

(Reproduced from *Business Education*)

Efficiency means doing your work effectively, and it means getting the maximum of results with the minimum of effort. It should be stated here that national efficiency, community efficiency and business efficiency are impossible without personal, individual efficiency.

The problem then of business education should not be mental training only but mental and technical training combined in such a way that in doing a given practical task the student's mind will do that work, whether it be running a typewriter, writing an advertisement or selling his services in the quickest, easiest and most effective way. In other words there is one quickest, best, easiest way to do anything. The mind should be taught how to use that one quickest, best, easiest way of performing a necessary task.

The aim of much so called education to-day is to train the mind only, and theoretically rather than practically. That is the reason so many thousand high school and college graduates are yearly released upon society without any ability to do anything but teach the theory which they have learned. The president of Princeton College is reported to have said that a Princeton graduate is not worth more than \$6 a week when he graduates because he neither knows medicine, nor law nor business.

I want to make it clear that theoretical training is training for mental efficiency, but not for business efficiency. Latin, Greek and higher mathematics are a mental drill but that knowledge, as knowledge, will not help a salesman to close a sale, or help a business man to write a legal contract, or help him organize a business. Herbert Spencer held that the first object of an education was to enable a man to make a living. Many of the high schools and universities seem to have almost lost sight of

Spencer's idea, which is as true to-day as it was when uttered by the great thinker.

I meet a great many college graduates who are street car conductors or driving dray wagons or doing manual or semi-manual work. They learned theory in school, but they did not learn how to make a living and they gravitated toward manual labor. Possibly half of the students in the schools of this country are practical-minded rather than theoretical-minded. When they are taught theory for its own sake they cannot see how to apply it. They lose interest and leave school.

The tremendous increase in attendance in the commercial department of our high schools prove my contention. Fifty per cent. of the students of this country leave school at the end of the sixth grade. Why? According to the government reports eighty per cent. of the young men of America, at the age of twenty-two are making only \$10 a week, and eighty per cent. of the men of America at the age of thirty-two (practically the same eighty per cent.) are only making \$10.25 a week, an increase of twenty-five cents a week for ten years. These young men have only finished the eighth grade. They received little business efficiency training, while the technically trained men of thirty-two are making \$43 a week. Is it any wonder we are living in a superficial age?

We are told that there are twenty-eight million students of school age in this country and that only twelve million of them are in school. We are told that four million boys and girls between the ages of fourteen and sixteen are out of school instead of being in school. Where are our real leaders in the future going to come from? They must come largely from the students who stay in school rather than those who go out.

When the student sees little connection between his studies in school and the practical, vital business problems all about him which he knows he must solve when he gets into life then he is likely to get discouraged, lose interest and drop out of school.

But the student must not lose sight of the mental development side of education. What the average student and the average parent needs to-day is more vision, a vision not for to-day but for ten or twenty years from now. A prominent commercial college man told me not long ago that he could not remember of a prospective student ever asking him anything about his faculty or the kind of training he would get. He said there were just two questions which all prospective students asked. (1) How much will it cost? (2) How soon can I get through? The

average prospective student is interested in the present and not in the future. He is interested in rapidity rather than efficiency. He sees nothing but the practical side of education. He has little realization of the meaning of mental development.

INDUSTRIAL NEEDS

(Indianapolis Times)

Following an important, epochal survey of the industries of Indiana, with a view to preparing for practical vocational training in the public schools of the State, Prof. Robert J. Leonard, of Indiana University, has made a survey of the population, the industries and the schools of the city of Hammond, Ind., and in a booklet, just issued by the school board of Hammond, has set out suggestions for a program for elementary industrial, prevocational and vocational education to be used in the Hammond field.

The central idea is that this progress has been framed on a basis found in Hammond, and not on any general or theoretical assumption of Hammond's needs. The Hammond program is to be peculiarly fitted to Hammond conditions. When the Hammond school child gets in the public school the rudiments of a trade, the purpose will be to give the child a start in a vocation which he can follow in Hammond. It is the purpose not only to train the child's hands for usefulness, but to prepare him for a job which, in the nature of things, he will be able to find in his own home field.

School authorities, employers and the people generally have co-operated to make the Hammond industrial survey complete and helpful.

As time goes on the people realize more and more how tremendously important the vocational training law of Indiana is to be as the means of leading the State to educational leadership.

RATHER A NICE "BOOST"

(Boston Transcript.)

What a striking combination of new things and old the corporation school represents! The ancient apprenticeship plan is here being developed by the great modern companies which have

been denounced as the destroyers of all the old methods in crafts and in trades, as the instruments which have put an end to the individualism that once was predominant. And the labor unions are reported to be heartily in sympathy with the corporation schools, since they represent ways in which men can make themselves more efficient—not be driven to greater efficiency by stop-watches, time-tests and speed-trials. When all of these schools have approached their full normal development the problems which now seem so vexatious in vocational training will have advanced a long way toward solution.

VALUE OF AN EDUCATION

What is the money value of an education? The average reduced to individual cases would be something like this: Two boys, age 14, are both interested in mechanics. One goes into the shops, the other into a technical school. The boy in the shops starts at \$4 a week, and by the time he is 18 he is getting \$7. At that age the other boy is leaving school and starting to work at \$10 a week. At 20 the shop-trained young fellow is getting \$9.50 and the technical graduate \$15; at 22 the former's weekly wage is \$11.50 and the latter's \$20; and by the time they are both 25 the shopworker finds \$12.75 in his pay envelope while the technical-trained man draws a salary of \$31. The figures are based on a study of 2,000 actual workers.—*Educational Bi-monthly*.

SOME HINTS FOR IMPROVING YOUR BUSINESS ENGLISH

Be appreciative of good literature wherever you find it.

Make collections of good advertising, good sales letters, good catalogues and booklets, and material of various kinds in the field of business English.

Read critically, yet appreciatively.

Search out the good points in the material that you find.

Try to find those points which you can adapt to your own use.

Do not confine your reading to trade literature.

Read some good stories.

Read some of the English classics.

Read the newspapers and magazines.

Be interested in history, biography, science, and all the other fields of writing. You can gain a great deal in your work from such reading.

In other words, be wide awake as to your opportunities in garnering English wheat from the field of business, and business wheat from the field of English literature.

Carry your study to work with you. Talk shop. If you meet a man who is a collection correspondent, ask him definite questions about his work. You can learn from him things that will help you. Let people know that you are interested in their subjects.

Observe business usage carefully. What is the difference between the letters the boss dictates and those you dictate?

Association with men is just as important as association with books, or association with facts and ideas.

Be interested, too, in oral English. Try to make your conversation more effective. When you have an opportunity, practice a bit of public speaking. Talk before your lodge or your church society, or what not.—*Personal Efficiency*.

HOW WE BUILD

To sow a thought is to reap an action, to sow an action is to reap a habit, to sow a habit is to reap a character, and to sow a character is to reap a destiny.—*Professor William James*.

GENERAL EDUCATIONAL NOTES

Mayor Mitchel and Police Commissioner Woods have opened a municipal school to provide technical and general education for the patrolmen of New York along lines which will better equip them for their work. This school is probably the first to be tried in any municipality, and will have a larger class than that of any United States Government school, including the combined student bodies of West Point, Annapolis, and the School of Cavalry at Fort Leavenworth, Kan.

Although confronted with a lack of teachers for the continuation schools for working children, provided by the new Cox Child Labor Law, the State Board of Education of Pennsylvania established six summer schools. Students are charged no tuition, but must pay their board and transportation. The schools are in Philadelphia, Reading, Scranton, Altoona, Pittsburgh and Erie.

The completion of a course of at least six weeks' study at an educational institution, or a correspondence course of one year, or the submission of satisfactory evidence to the Public Health Council of special training and practical experience in public health work, will be required of health officers hereafter ap-

pointed, if the State Public Health Council of New York carries out its present intention.

State Commissioner of Education Kendall submitted a report to the Educational Board of New Jersey, showing that the \$80,000 available under State aid to vocational education will not be sufficient next year for the districts entitled to this State aid. The report showed that the school year just closing has witnessed a rapid extension of vocational extension in the State under the provisions of the vocational school law of 1913. "The law has proved effective and the rules and regulations adopted by the State Board of Education have for the most part proved satisfactory," reported Dr. Kendall.

One of the important features of the educational system of Paterson, New Jersey, is the arrangements for the vocational classes the coming winter. Carpenters' and plumbers' classes have been organized for two years and have been successful, says the Paterson *Guardian*. Last winter the members who attended the vocational classes exceeded expectations. What will be done this year it is impossible to say as yet, but it seems probable that the number of those in attendance will be quite as large as then and possibly more will join. The instruction given last season was so good that much favorable comment was caused in the trade and the prospects of further encouragement this season is promising.

Paul N. Furman, secretary of the Pennsylvania Child Labor Association, recently said: "There is no question on which the public is more keenly alert today than that of vocational training. Interest in this subject has been growing in Pennsylvania until it has now reached a point where this State promises to become the foremost in the Union in preparing its school children to take full advantage of industrial and commercial opportunities."

Business men should act as an unofficial board of education and work in co-operation with school authorities in determining the vocational and pre-vocational education of students in public schools, according to Charles C. Heyl, head of the West Philadelphia, Penn., High School. He said the high schools were becoming the big educational institutions of the day. He declared that pre-vocational education was not of any great value unless the opportunity to apply the learning he has received along vocational lines were open for the student.

When former Mayor Joseph P. Riordan, of Harrison, New Jersey, told citizens of that town that not only do congested conditions exist in the Harrison public schools, but that forty Harrison children are attending school in East Newark because

Harrison has not the facilities, he delivered a knockout blow to those who had planned at a public meeting to voice opposition to the idea of erecting a new school in that town. Addresses were made by prominent State educators in which they urged that the school curriculum of Harrison in the future provide vocational and industrial education and manual training for the children of the town.

More than 1,000 Hibbing, Minnesota, citizens viewed the accomplishments of school children at a recent exhibit there along vocational lines. Every feature of the industrial exhibit attracted attention with the result that the exhibition was one of the most successful of its kind in the history of local schools. Especially attractive to the women were the exhibits made by the domestic science students. Buffet lunches were served in three different places in the school. The men paid particular attention to the manual training work, including carpentering and forging. Each exhibit, of knives, hammers, tongs, cabinets, tables, foot stools, book cases and other carpentry or forging was so perfectly displayed that they appeared as though they had come from factories.

With the culmination of the manual training school's work in Kalamazoo, Michigan, for the term, a slight insight of the accomplishments of students in the several departments is obtainable in the reports of George H. Waite, head of the department. Not only has the past year been one of the most successful periods in the growth of manual training endeavors there, but it has likewise proven a twelve months filled with wonderful accomplishments in activities along domestic science work. Students and instructors alike have displayed a great deal of interest in the work during the year and both have worked together in an admirable fashion. Many useful articles have been made by the students, making the work not only educational but profitable.

Tentative arrangements will be made by the Board of Education to locate the new building for the Fawcett Drawing School and the Girls' Industrial School on the site of the old Normal School at Washington and Linden streets, instead of at Washington and Academy streets, Newark, New Jersey, as has been proposed. It has been shown that the former site will provide more room for such a building, and the purchase of additional property, if needed, will be less expensive. The new Boys' Industrial School might be housed in the same property.

Graduates who received degrees at Vassar this year are discussing three important items in the announcements of President Henry Noble MacCracken. They are the addition of courses in horticulture, landscape gardening, law and journalism, and mark the first big changes in the college curriculum in many years.

At a meeting, characterized by those present as the most momentous ever held in New London, Conn., the board of education voted to try the plan of vocational training in the grammar grades for one year, at least.

NEW MEMBERS

Since the last membership statement appeared in the BULLETIN the following new members have been received:

Class "A"

The Jeffrey Manufacturing Company, Columbus, Ohio—Mr. W. A. Grieves.

Class "C"

Miss Florence M. Hall, Director of Vocational Guidance, Spokane Public Schools, Spokane, Washington.

Mr. Joseph Hirsch, Kops Brothers, 120 East 16th Street, New York City.

Mr. Jerome J. Green, R. F. D. No. 3, Box 18K, San Diego, Cal.
Miss Beulah Kennard, The Department Store Education Association, 105 West 40th Street, New York City.

Committees of The National Association of Corporation Schools 1915-16

Trade Apprenticeship Schools

J. W. L. Hale, *Chairman*,
The Pennsylvania Railroad Co.,
Altoona, Pa.
W. L. Chandler,
Dodge Manufacturing Co.,
Mishawaka, Indiana.
J. M. Larkin,
Fore River Shipbuilding Corporation,
Quincy, Mass.
F. W. Thomas,
Atchison, Topeka & Santa Fe Railway,
Topeka, Kansas.
Paul P. Vlasek,
Cadillac Motor Car Co.,
Detroit, Mich.

Advertising, Selling and Distribution Schools

Dr. Lee Galloway, *Chairman*,
New York University,
New York, N. Y.
Professor M. T. Copeland,
Harvard Business School,
Cambridge, Mass.
S. W. Cady,
American Optical Co.,
Southbridge, Mass.

Special Training Schools

J. W. Dietz, *Chairman*,
Western Electric Co.,
Chicago, Ill.
J. E. Banks,
American Bridge Co.,
Ambridge, Pa.
T. E. Donnelley,
R. R. Donnelley & Sons Co.,
Chicago, Ill.
Fred R. Jenkins,
Commonwealth Edison Co.,
Chicago, Ill.
W. K. Page,
Addressograph Co.,
Chicago, Ill.

Retail Salesmanship

James W. Fisk, *Chairman*,
J. L. Hudson Dept. Store,
Detroit, Mich.
J. Harvey Borton,
Haines, Jones & Cadbury,
Philadelphia, Pa.
Miss Beulah Kennard,
105 West 40th Street,
New York, N. Y.

Committees of The National Association of Corporation Schools 1915-16

Advertising, Selling and Distribution Schools—Continued.

Frank L. Glynn,
Boardman Apprentice Shops,
New Haven, Conn.
C. A. S. Howlett,
Diehl Manufacturing Co.,
Elizabeth, N. J.

Accounting and Office Work Schools

George B. Everitt, *Chairman*,
National Cloak and Suit Co.,
New York, N. Y.
Dr. Louis I. Dublin,
Metropolitan Life Insurance Co.,
New York, N. Y.
R. H. Puffer,
Larkin Co.,
Buffalo, N. Y.
H. A. Hopf, Phoenix Mutual Life Insurance Co.,
Hartford, Conn.
Frederick Uhl,
American Telephone & Telegraph Co.,
New York, N. Y.

Safety and Health

Sidney W. Ashe, *Chairman*,
General Electric Co.,
Pittsfield, Mass.
L. H. Burnett,
Carnegie Steel Co.,
Pittsburgh, Pa.
Arthur T. Morey,
Commonwealth Steel Co.,
St. Louis, Mo.
F. P. Pitzer,
The Equitable Life Assurance Society,
New York, N. Y.
J. C. Robinson,
The New York Edison Co.,
New York, N. Y.

Allied Institutions

James A. Roosevelt, *Chairman*,
Roosevelt & Thompson,
New York, N. Y.
Norman Collyer,
Southern Pacific Railroad Co.,
San Francisco, Cal.
R. L. Cooley,
Supt. Continuation Schools,
Milwaukee, Wis.

Codification Committee

Harry Tipper, *Chairman*,
The Texas Co.,
New York, N. Y.
T. M. Ambler,
Brooklyn Union Gas Co.,
Brooklyn, N. Y.
A. Blumenthal,
Bing & Bing Construction Co., Inc.,
New York, N. Y.
E. M. Henderson,
Manhattan Rubber Manufacturing Co.,
Passaic, N. J.
K. W. Waterson,
American Telephone & Telegraph Co.,
New York, N. Y.

New Membership Committee not yet appointed.

Retail Salesmanship—Continued.

H. G. Petermann,
United Cigar Stores Co.,
New York, N. Y.
Mrs. Lucinda Prince,
264 Boylston Street,
Boston, Mass.

Employment Plans

C. R. Johnson, *Chairman*,
Goodyear Tire & Rubber Co.,
Akron, Ohio.
N. F. Dougherty,
The Pennsylvania Railroad Co.,
Philadelphia, Pa.
Philip J. Reilly,
Dennison Manufacturing Co.,
Framingham, Mass.
Edward B. Saunders,
Simonds Manufacturing Co.,
Fitchburg, Mass.
W. M. Skiff,
National Lamp Works, General Electric Co.,
Nela Park, Cleveland, Ohio.

Public Education

E. H. Fish, *Chairman*,
Norton & Norton Grinding Companies,
Worcester, Mass.
E. G. Allen,
Cass Technical High School,
Detroit, Mich.
Arthur E. Corbin,
Packard Motor Car Co.,
Detroit, Mich.
Arthur E. Earle,
Winchester Repeating Arms Co.,
New Haven, Conn.
Miss Harriet Fox,
Strawbridge & Clothier,
Philadelphia, Pa.

Vocational Guidance

Dr. Henry C. Metcalf, *Chairman*,
Tufts College,
Tufts, Mass.
C. R. Sturdevant,
American Steel & Wire Co.,
Worcester, Mass.
Albert C. Vinal,
American Telephone & Telegraph Co.,
New York, N. Y.

Committee on Nominations

John L. Conover, *Chairman*,
Public Service Corporation of New Jersey,
Newark, N. J.
N. F. Dougherty,
The Pennsylvania Railroad Co.,
Philadelphia, Pa.
H. W. Dunbar,
Norton Grinding Co.,
Worcester, Mass.
L. W. George,
Commonwealth Steel Co.,
St. Louis, Mo.
A. W. Soderberg,
Carnegie Steel Co.,
Munhall, Pa.

